

BOOK REVIEW

Genetics for dummies and idiots

Genes and DNA: A Beginner's Guide to Genetics and Its Application

Charlotte K Omoto and Paul F Lurquin
Columbia University Press, New York, USA; 2004. 217pp.
Price £18.50, paperback. ISBN: 0231130139

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Reviewed by J Sved

This book is not intended as a text; it is for the rest of us, dummies and idiots alike. A quick search of amazon.com reveals 'Genetics for Dummies' and 'The Complete Idiot's Guide to decoding your genes'. Searching slightly more broadly, there are 'Biology for dummies' and 'Complete Idiot's Guide to Biology'. It seems that there are competing 'Dummies' and 'Complete Idiot' books for almost everything, and I suppose that this book fits somewhere in this framework.

Of course, none of this is intended as derogatory. If the book works for dummies and idiots, it should work for everyone. The everyday style of writing is generally easy to follow. I came across few facts or arguments that I would disagree with. And it is difficult to fault the breadth of topics covered in the book, ranging from DNA and mendelian genetics to population and quantitative genetics. The authors have made admirable efforts to connect the material to current debates such as cloning and GM foods, and to incorporate events such as the World Trade Center attacks and recently uncovered disease genes, usually in a US context.

I liked the 'Try this at home' section that accompanies many chapters. A simple recipe for preparing DNA from

onions allows the reader/participator to see what DNA actually looks like. There are exercises on constructing pedigrees and decoding DNA.

Of course compromises are needed when one tries to pack all of this information into a quite small book. For example by page 4, we have already been introduced to the enzyme deoxyribonuclease in the context of Avery's transformation experiments. Another 10 pages on and we are through the theory of PCR. Most of us have difficulty remembering back to before we had been introduced to the idea of an 'enzyme', and it is probable that most people tackling a book such as this will already know what an enzyme is, but I do feel sorry for anyone who conscientiously tries to follow all of this from a totally naïve background. These are certainly not the sorts of leaps in understanding that we would expect or encourage our students to make.

There are no cited references. Instead there are a few, usually fairly generic, references to web sites. This seems appropriate for the expected audience for such a book who would not have the need or ability to refer to primary sources.

The figures in the book are all black-and-white, and certainly do not compete with the sorts of colour diagrams that one finds in many modern text books. I would have liked to see more of them if the authors were really serious about explaining things as simply as possible. Still as a book that is reasonably cheap compared to prescribed university texts, it generally achieves what it sets out to do – introduce basic DNA and genetics to a non-biological audience.

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